APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/814,666	03/31/2004	Richard Francis Cormier	EMC04-05(04034)	5977

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EXAMINER
WON, MICHAEL YOUNG

ART UNIT	PAPER NUMBER
2155	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

	Application No.	Applicant(s)
Office Action Summary	10/814,666	CORMIER, RICHARD FRANCIS
	Examiner	Art Unit	
	MICHAEL Y. WON	2155	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>31 March 2004</u>.

2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1-30</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>1-7,11,14-21,25 and 28-30</u> is/are rejected.

7) ☒ Claim(s) <u>8-10,12,13,22-24,26 and 27</u> is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All b) ☐ Some * c) ☐ None of:

        1. ☐ Certified copies of the priority documents have been received.

        2. ☐ Certified copies of the priority documents have been received in Application No. _____.

        3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

1.   This action is in response to the amendment filed March 31, 2004.

2.   Claims 1-30 have been examined and are pending with this action.

Claim Rejections - 35 USC § 102

        The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3.   Claims 1-7, 11, 14-21, 25, and 28-30 are rejected under 35 U.S.C. 102(b) as

being anticipated by Gerard et al. (US 6,023,704).

<u>INDEPENDENT:</u>

        As per **claim 1**, Gerard teaches a method for processing client requests

supporting a plurality of object models, the method comprising:

        receiving a former client request requiring access to a former object defined by a

former object model (see col.3, lines 50-52: "Each object is an identifiable, encapsulated

piece of code and data that provides one or more services when requested by a client";

and col.4, lines 5-7: "The server object receives and interprets the message, and can

then decide what operations to perform");

mapping a former object required for access by the former client request to a corresponding current object existing within a current object model (see col.2, lines 54-58: "swapping the identities of the first and second objects"; and col.7, lines 43-46: "instantiates a second object 127 as an instance of the second class that defines the desired new object configuration");

copying current object data within the current object of the current object model to former object data within an instantiation of the former object (see col.2, lines 58-60: "and reading and converting the state data of the old object (now the second object) into the new object (now the first object)"; and col.8, line 3-13: "first object 126 has been transformed into a new configuration (as shown in FIG. 8) defined by the second class... "); and

processing the former client request using the instantiation of the former object to satisfy the former client request (see col.4, lines 5-7: "The server object receives and interprets the message, and can then decide what operations to perform").

As per **claim 15**, Gerard teaches a computer system comprising: a memory (see col.5, lines 11 & 20-24); a processor (see col.5, line 10); a communications interface (see col.5, line 12); an interconnection mechanism coupling the memory, the processor and the communications interface (see col.5, lines 13-14); wherein the memory is encoded with a server application including an object adapter that when performed on the processor (see col.5, lines 20-24), is operable to process client requests supporting a plurality of object models by causing the computer system to perform the operations (see col.3, lines 65-67) of:

receiving, via the communications interface into the memory, a former client

request requiring access to a former object defined by a former object model (see col.3,

lines 50-52: "Each object is an identifiable, encapsulated piece of code and data that

provides one or more services when requested by a client"; and col.4, lines 5-7: "The

server object receives and interprets the message, and can then decide what

operations to perform");

mapping a former object required for access by the former client request to a

corresponding current object existing within a current object model (see col.2, lines 54-

58: "swapping the identities of the first and second objects"; and col.7, lines 43-46:

"instantiates a second object 127 as an instance of the second class that defines the

desired new object configuration");

copying current object data within the current object of the current object model

to former object data within an instantiation of the former object (see col.2, lines 58-60:

"and reading and converting the state data of the old object (now the second object) into

the new object (now the first object)"; and col.8, line 3-13: "first object 126 has been

transformed into a new configuration (as shown in FIG. 8) defined by the second

class... "); and

processing the former client request using the instantiation of the former object to

satisfy the former client request (see col.4, lines 5-7: "The server object receives and

interprets the message, and can then decide what operations to perform").

As per **claim 29**, Gerard teaches a computer system comprising: a memory (see

col.5, lines 11 & 20-24); a processor (see col.5, line 10); a communications interface

(see col.5, line 12); an interconnection mechanism coupling the memory, the processor

and the communications interface (see col.5, lines 13-14); wherein the memory is

encoded with a server application including an object adapter that when performed on

the processor (see col.5, lines 20-24), provides a means for processing client requests

supporting a plurality of object models (see col.3, lines 65-67), such means including:

means for receiving, via the communications interface into the memory, a former

client request requiring access to a former object defined by a former object model (see

col.3, lines 50-52: "Each object is an identifiable, encapsulated piece of code and data

that provides one or more services when requested by a client"; and col.4, lines 5-7:

"The server object receives and interprets the message, and can then decide what

operations to perform");

means for mapping a former object required for access by the former client

request to a corresponding current object existing within a current object model (see

col.2, lines 54-58: "swapping the identities of the first and second objects"; and col.7,

lines 43-46: "instantiates a second object 127 as an instance of the second class that

defines the desired new object configuration");

means for copying current object data within the current object of the current

object model to former object data within an instantiation of the former object (see col.2,

lines 58-60: "and reading and converting the state data of the old object (now the

second object) into the new object (now the first object)"; and col.8, line 3-13: "first

object 126 has been transformed into a new configuration (as shown in FIG. 8) defined

by the second class... "); and

means for processing the former client request using the instantiation of the
former object to satisfy the former client request (see col.4, lines 5-7: "The server object
receives and interprets the message, and can then decide what operations to perform").

As per **claim 30**, Gerard teaches a computer program product having a
computer-readable medium including computer program logic encoded thereon that,
when executed on a computer system (see col.5, lines 20-24), processes client
requests supporting a plurality of object models by causing the computer system to
perform the operations of:

receiving a former client request requiring access to a former object defined by a
former object model (see col.3, lines 50-52: "Each object is an identifiable, encapsulated
piece of code and data that provides one or more services when requested by a client";
and col.4, lines 5-7: "The server object receives and interprets the message, and can
then decide what operations to perform");

mapping a former object required for access by the former client request to a
corresponding current object existing within a current object model (see col.2, lines 54-
58: "swapping the identities of the first and second objects"; and col.7, lines 43-46:
"instantiates a second object 127 as an instance of the second class that defines the
desired new object configuration");

copying current object data within the current object of the current object model
to former object data within an instantiation of the former object (see col.2, lines 58-60:
"and reading and converting the state data of the old object (now the second object) into
the new object (now the first object)"; and col.8, line 3-13: "first object 126 has been

transformed into a new configuration (as shown in FIG. 8) defined by the second

class... "); and

processing the former client request using the instantiation of the former object to

satisfy the former client request (see col.4, lines 5-7: "The server object receives and

interprets the message, and can then decide what operations to perform").

DEPENDENT:

As per **claims 2 and 16**, which respectively depend on claims 1 and 15, Gerard

further teaches wherein receiving a former client request requiring access to a former

object defined by a former object model comprises: exposing a former service interface

for use by former clients for receipt of former client requests; receiving the former client

request on the former service interface; and forwarding the former client request via the

former service interface to an former client adapter for processing of the former client

request (see col.3, line 65-col.4, line 7).

As per **claims 3 and 17**, which respectively depend on claims 2 and 16, Gerard

further teaches wherein exposing a former service interface for use by former clients for

receipt of former client requests comprises: providing a former remote method

invocation interface for former clients to use to provide former client requests for

processing (see col.3, line 65-col.4, line 7); and concurrently providing a current remote

method invocation interface for current clients to use to provide current client requests

for processing (see col.8, lines 3-13).

As per **claims 4 and 18**, which respectively depend on claims 2 and 16, Gerard further teaches wherein mapping a former object required for access by the former client request to a corresponding current object existing within a current object model comprises: obtaining an identity of the former object specified within the former client request (see col.74, lines 15-18); obtaining a former object definition from the identity of the former object within a former object model definition (see col.4, lines 18-20); and using the former object definition, instantiating the former object within a memory system (see col.4, lines 5-7).

As per **claims 5 and 19**, which respectively depend on claims 4 and 18, Gerard further teaches wherein: the former object and current object are defined in an object-oriented programming language (see col.3, lines 18-19); and wherein obtaining a former object definition comprises: using a reflection technique to identify, from a former object model definition file, the former object definition based on the identity of the former object specified within the former client request (see col.4, lines 3-5); and wherein instantiating the former object within a memory system comprises: using a former object class loader to load the former object definition, identified in the former object definition file, into the memory system as an instantiation of the former object (see col.4, lines 18-20).

As per **claims 6 and 20**, which respectively depend on claims 4 and 18, Gerard further teaches wherein mapping a former object required for access by the former client request to a corresponding current object existing within a current object model comprises: accessing object mapping entries in an object map to identify a current

object definition defined in a current object model that corresponds to the instantiated former object required for access by the former client request; and instantiating the current object based on the current object definition (see col.7, lines 43-46).

As per **claims 7 and 21**, which respectively depend on claims 6 and 20, Gerard further teaches wherein copying current object data within the current object of the current object model to former object data within an instantiation of the former object comprises: copying current object data values stored within current data fields of an instantiation of the current object to former data values within former data fields of an instantiation of the former object (see col.8, lines 3-15).

As per **claims 11 and 25**, which respectively depend on claims 1 and 15, Gerard further teaches wherein copying current object data within the current object of the current object model to former object data within an instantiation of the former object comprises: copying current object data values stored within current data fields of an instantiation of the current object to former data values within former data fields of an instantiation of the former object (see col.8, lines 3-15).

As per **claims 14 and 28**, which respectively depend on claims 1 and 15, Gerard further teaches wherein: the operations of receiving a former client request, mapping a former object to a corresponding current object, copying current object data within the current object to former object data within an instantiation of the former object and processing the former client request are performed within a current version of a storage area network management application (see col.7, lines 8-10); and wherein receiving a former client request comprises: receiving the former client request from a former

version of a storage area network management client application, the former client

request containing a request for access to former storage area network management

object data contained within former objects defined by a former object model that has

been replaced by the current object model (see claim 4 rejection above); and wherein

the steps of mapping, copying and processing the former client request allow the former

version of the storage area network management client application to operate with the

current version of the storage area network management application that maintains

storage area network management data within current objects conforming to the current

object model (see col.8, lines 3-16).

Allowable Subject Matter

4.   Claims 8-10, 12, 13, 22-24, 26 and 27 are objected to as being dependent upon

a rejected base claim, but would be allowable if rewritten in independent form including

all of the limitations of the base claim and any intervening claims.

        The following is a statement of reasons for the indication of allowable subject

matter:

        The prior art of record does not disclose, teach, or suggest neither singly nor in

combination the claimed limitation of "wherein copying current object data values stored

within current data fields of an instantiation of the current object to former data fields

within an instantiation of the former object comprises: identifying, for each current field

in the current object that maps to a corresponding former field in the former object, if a

field adapter exists for converting current field data in the instantiation of the current

object to former field data for use in the instantiation of the former object, and i) if an

object adapter exists, operating the adapter to convert the current field data in the

instantiation of the current object to former field data for use in the instantiation of the

former object; and ii) if no object adapter exists, copying the current field data in the

instantiation of the current object for use as former field data for use in the instantiation

of the former object" as recited in claims 8, 12, 22, and 26.

Claims 9-10, 13, 23-24, and 27 respectively, depend on claims 8, 12, 22, and 26.

Conclusion

5.   For the reason above, claims 1-7, 11, 14-21, 25, and 28-30 have been rejected,

claims 8-10, 12, 13, 22-24, 26, and 27 have been objected, and claims 1-30 remain

pending.

6.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to MICHAEL Y. WON whose telephone number is

(571)272-3993. The examiner can normally be reached on M-Th: 10AM-8PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Saleh Najjar can be reached on 571-272-4006. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael Won/

Primary Examiner

March 20, 2008